

APPENDIX C: LIST OF APPLICABLE REGULATIONS

Federal Environmental Legislation, Regulations, and Orders

National Environmental Policy Act (NEPA)

42 USC §§ 4321-4370c

The National Environmental Policy Act requires federal agencies, early in the agency's planning process, to assess the potential environmental impacts of implementing major federal actions so that this information can be used in the decision-making process. The Act requires analysis of effects from the full range of project alternatives, along with public comment and review. NEPA specifies several levels of environmental review, ranging from a Categorical Exclusion for actions with no potentially significant impact, to Environmental Impact Statements for major, unprecedented, or controversial actions having potentially significant environmental impacts. NEPA is implemented through Council on Environmental Quality regulations.

Council on Environmental Quality (CEQ) Regulations Implementing NEPA

40 CFR Parts 1500-1508

Regulations developed by the Council on Environmental Quality define the procedures for completing the environmental review and analysis called for in NEPA. The regulations outline the principles to be followed in the environmental impact analysis process, including incorporating environmental review early in project planning, preparing an action-forcing environmental document to assist in project decisions rather than one that documents decisions previously made, and ensuring public involvement throughout the process. The regulations also include guidelines for determining what level of environmental review is required; the contents of environmental documents; procedures for comments by the public and federal agencies; and schedules. The regulations specify that notices will be published in the Federal Register prior to preparation of an EIS, and require all EISs to be filed with EPA's Office of Federal Activities upon completion.

Clean Air Act (CAA)

42 USC § 7401 *et seq*

The Clean Air Act of 1970 was passed to "protect and enhance the quality of the Nation's air resources so as to promote public health and welfare and the productive capacity of its population." Several major revisions have been passed since 1970. The Act requires the establishment of national primary and secondary ambient air quality standards (NAAQS) to address pervasive air pollution problems. Primary standards define levels of air quality necessary to protect public health, while secondary standards define levels necessary to protect the public welfare from known or anticipated adverse effects from pollutants. These standards have been established for sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, lead, and particulate matter less than 10 microns in diameter. The Act gives state and local authorities the responsibility to ensure regional attainment of the standards. The most recent 1990 Clean Air Act Amendments provide new objectives for (1) regions not attaining the NAAQS, particularly concerning ozone; (2) a control program for 189 toxic air pollutants, including requirements for both stationary and mobile sources; (3) new rules on monitoring, emission tracking and trading, permitting, and other standards for acid rain and the sulfur dioxide and nitrogen oxide precursors of acid precipitation; (4) requirements for

phasing out CFCs as well as other steps to address stratospheric ozone depletion and atmospheric warming; (5) tighter mobile source emission standards; and (6) strengthening of the enforcement powers of regulatory agencies.

Montreal Protocol on Substances that Deplete the Ozone Layer, Title VI of the Clean Air Act Amendments of 1990

The Montreal Protocol was developed under the guidance of the United Nations Environmental Programme (UNEP) in September 1987. As amended in 1990 and 1992, and as ratified by 149 countries as of May 1996, the Protocol identifies the main ozone depleting substances (ODSs) and specifies a timetable for phasing out the consumption and production of ODSs. Title VI of the Clean Air Act Amendments of 1990 establishes phaseout requirements for ODSs consistent with the Montreal Protocol.

Noise Control Act

42 USC § 4901 *et seq*

The Noise Control Act seeks to limit the exposure and disturbance individuals and communities suffer from noise. Its focus is on surface transportation and construction sources, particularly near airport environments. The Act also specifies that performance standards for transportation equipment will be established, with the assistance of the Department of Transportation. Section 7 regulates sonic booms and gives the Federal Aviation Administration regulatory authority, after consultation with the EPA. In addition, the 1987 Quiet Community amendments give state and local authorities greater involvement in controlling noise.

Pollution Prevention Act of 1990 (PPA)

42 U.S.C. § 13101 *et seq*

The Pollution Prevention Act establishes pollution prevention as a national objective, and specifies a hierarchy of practices led by pollution prevention. The Act defines pollution prevention as source reduction and other practices that reduce or eliminate the creation of pollutants. It requires firms that prepare toxic chemical release forms under the Emergency Planning and Community Right to Know Act to provide information on pollution prevention and recycling activities.

Coastal Zone Management Act (CZMA)

16 USC § 1451 *et seq*

The Coastal Zone Management Act seeks to preserve, protect, and restore coastal areas. Coastal areas include wetlands, floodplains, estuaries, beaches, dunes, barrier islands, coral reefs, and fish and wildlife and their habitat. The Act emphasizes state leadership and development of state Coastal Zone Management Plans. The Act also encourages inventories of coastal resources be taken and standards set to protect those resources defined as nationally significant. All federal agencies must assess whether their activities will affect a state's coastal zone and ensure, to the maximum extent possible, that the activities are consistent with approved state Coastal Zone Management Programs.

Clean Water Act (CWA)

33 USC §1251 *et seq*

The Clean Water Act establishes water pollution control standards and programs with the objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's water resources. The Act provides for the elimination of the discharge of pollutants into navigable waters and for water quality goals to protect fish and wildlife. The Act specifies (1) that actions must comply with federal and state water quality criteria; (2) regulations for issuing permits under the National Pollutant Discharge Elimination System (NPDES) for stormwater discharge be established by the EPA, (3) states assess non-point source water pollution problems and develop pollution management plans.

Resource Conservation and Recovery Act (RCRA)

42 USC § 6901 *et seq*

The Resource Conservation and Recovery Act regulates generators and transporters of hazardous waste and owners or operators of facilities for the treatment, storage, and disposal of hazardous waste. In addition, the Act establishes standards pertaining to solid waste. RCRA establishes a “cradle-to-grave” system of requirements for managing hazardous waste, from generation to eventual disposal. Under RCRA, EPA has promulgated extensive regulations defining solid and hazardous waste, and stipulating technical and procedural requirements for waste management. The Act encourages states to assume responsibility for implementing the regulatory program in place of EPA. In 1984 the Hazardous and Solid Waste Amendments Act revised RCRA to add limitations on land disposal of hazardous wastes, regulate underground storage tanks containing petroleum or hazardous substances, and create additional state powers and responsibilities to regulate municipal and industrial solid waste.

Toxic Substances Control Act (TSCA)

15 USC § 2601 *et seq*

The Toxic Substances Control Act authorizes the EPA to administer a toxic substances control program by requiring information about the production, use, and health and environmental effects of existing chemicals as well as new chemicals proposed for manufacture. The Act gives EPA the authority to require manufacturers to conduct tests, evaluate the potential risks of a chemical, and prohibit its manufacture if an unreasonable risk to health or the environment is found. Section 6 of the Act specifically regulates, among others, polychlorinated biphenyls (PCBs) and asbestos.

National Historic Preservation Act (NHPA)

16 USC § 470 *et seq*

The National Historic Preservation Act establishes a national policy to preserve, restore, and maintain cultural resources. It gives the Advisory Council on Historic Places the responsibility for implementation. The Act sets up the National Register of Historic Places as the mechanism to designate public or privately owned properties deserving protection. Federal agencies must take into account the effect of a project on any property included in or eligible for inclusion in the National Register. State Historic Preservation Officers are given the responsibility to review potential impacts to cultural resources and they have enforcement authority.

Endangered Species Act (ESA)

16 USC § 1531 *et seq*

The Endangered Species Act seeks to conserve endangered and threatened species of plants and animals. It directs the Fish and Wildlife Service to maintain a list of such species and designate critical habitat to afford them legal protection. The Act requires federal agencies to consult with the Fish and Wildlife Service or the National Marine Fisheries Service to assess the potential effects to listed species or critical habitat. If a listed species may be affected, a biological assessment is required to determine the impact. The agency must undertake mitigation measures if the impact is found to be negative, or the project must be stopped.

Bald and Golden Eagle Protection Act

16 USC § 688 *et seq*

The Bald Eagle and Golden Eagle Protection Act makes it illegal to take, pursue, or disturb American bald and golden eagles, their nests, or their eggs. Consultation with the Department of Interior is required if a nest is found within a project area.

Marine Mammal Protection Act (MMPA)

16 USC § 1361

The Marine Mammal Protection Act seeks to conserve endangered and threatened species of marine mammals. The Act authorizes the National Oceanic and Atmospheric Administration and the National Marine Fisheries Service to review federal projects for potential impacts to marine mammals and their habitat.

Marine Protection, Research, and Sanctuaries Act

33 USC § 1401 *et seq*

The Marine Protection, Research, and Sanctuaries Act regulates the disposal of all materials into the ocean to prevent adverse effects to human welfare, the marine environment, ecological systems, or economic benefits. It provides EPA with the authority to issue permits for ocean dumping. The Act also establishes the Marine Sanctuaries Program, which designates certain areas as ocean sanctuaries to preserve or restore them for their conservation, recreational, ecological, or aesthetic values.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)

42 USC 9601 *et seq*

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or the Superfund, creates authority and procedures for conducting emergency responses, removal and remediation actions at sites requiring a cleanup of releases of hazardous substances. The Act establishes a federal fund, based on taxes on petroleum and chemical feedstocks, to pay for cleaning up sites containing hazardous substances if the parties responsible for the sites do not pay. The Act also specifies standards of liability, and provides rules or procedures for determining compensation, reportable quantities of releases of hazardous substances, penalties, employee protection, claims procedures, and cleanup standards. The Superfund Amendment and Reauthorization Act of 1986 (SARA) revised and extended CERCLA in 1986. SARA Title III, the Emergency Planning and Community Right To Know Act, provides for emergency planning and preparedness, community right-to-know reporting, and toxic chemical

release reporting. The Act requires that information about hazardous materials be provided to state and local authorities. Such information includes material safety data sheets, emergency and hazardous chemical inventory forms, and toxic chemical release reports.

The Department of Transportation Act of 1966, Section 4(f)
49 USC § 303(c)

The Act prohibits the Secretary of Transportation from approving the use of publicly owned land from a park, recreation area, wildlife or waterfowl refuge or land from a historic site unless there is no feasible alternative and impacts to recreational resources have been minimized through planning and/or mitigation.

FAA Order 1050.1D, Policies and Procedures for Considering Environmental Impacts

Executive Order 1050.1D establishes FAA policies and procedures for assuring agency compliance with environmental procedures as set forth in the Council of Environmental Quality regulation for implementation of NEPA. Specifically, this includes procedures for the preparation of Environmental Impact Statements and Findings of No Significant Impact and for preparing and processing environmental assessments of FAA actions. This order implements NEPA, Order DOT 5610.1C, Procedures for Considering Environmental Impacts, and 27 other statutes, directives, and orders.

Executive Order 11988, Floodplain Management

Executive Order 11988 requires federal agencies to develop procedures that consider potential flood hazards and floodplain management criteria for projects proposed in a floodplain area. Its guidelines seek to restrict development in floodplains and avoid impacts whenever possible.

Executive Order 11990, Protection of Wetlands

Executive Order 11990 requires federal agencies to consider protecting wetlands when selecting a location for a proposed action. Its guidelines seek to minimize impacts to wetlands from federal development.

Executive Order 12114, Environmental Effects Abroad of Major Federal Actions

Executive Order 12114 provides for the consideration of potential environmental effects from federal actions on the global commons outside of the jurisdiction of any nation or on natural resources of global importance designated for protection by the President or by international agreement.

Section 1 outlines the purpose of this EO is to “enable responsible officials of Federal Agencies having ultimate responsibility for authorizing and approving actions encompassed by this Order to be informed of pertinent considerations and to take such considerations into account with other pertinent considerations of national policy, in making decisions regarding such actions. While based on independent authority, this Order furthers the purpose of the National Environmental Policy Act...and represents the United States Government’s exclusive and complete determination of the procedural and other actions to be taken by Federal agencies to further the purpose of the National Environmental Policy Act, with respect to the environment outside the United States, its territories and possessions.” Section 2 (b) specifies that “Major Federal actions significantly affecting the environment of a foreign nation not participating with the United States and not otherwise involved in the action” are actions included and covered by this Executive Order.

The Executive Order sums up the FAA's right to require NEPA in the case of launches that have the potential to significantly impact foreign States. In the case where a vehicle is launching from a foreign soil and the foreign government requires an EA or EIS as part of their own government's regulations, the FAA reserves the right to accept the environmental documentation required by the foreign government. Additionally, the foreign government may have entered into internationally binding Treaties or Agreements as a nation that must be addressed in the environmental documentation, even if the United States is not a party to the treaty.

Additional environmental requirements may be placed upon a U.S. company doing business abroad by the World Bank, The United Nations (to potentially include organizations sanctioned by the United Nations), and any local or regional regulatory body recognized by the foreign government.

Executive Order 12372, Intergovernmental Review of Federal Programs

Executive Order 12372 directs federal agencies to provide opportunities for consultation by elected officials of state and local governments that would be directly affected by proposed federal financial assistance or direct federal development. Federal agencies must provide state and local officials the opportunity to comment on actions that could affect their jurisdictions.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 requires federal agencies to make environmental justice a priority by identifying and addressing disproportionately high and adverse human health or environmental effects of its actions on minority and low-income populations. The Order requires minority and low-income communities to be given access to public information and an opportunity for public participation concerning programs, policies, and activities that could affect human health.

Executive Order 13089, Coral Reef Protection

Executive Order 13089 requires federal agencies to: identify actions that may affect existing U.S. coral reef ecosystems, use their resources to protect and enhance the coral reefs, and insure that their actions will not adversely affect the quality of the coral reef ecosystem. This order establishes a U.S. Coral Reef Task Force that will work with fishery management officials, affected states, and other relevant agencies to reduce the effects of pollution, sedimentation, and fishing on the reef ecosystem.

Federal Commercial Space Legislation and Orders

Commercial Space Launch Act of 1984

As codified at 49 USC Subtitle IX, ch. 701-- Commercial Space Launch Activities, 49 USC §§ 70101-70121

Chapter 701 of 49 U.S.C. Subtitle IX authorizes the Secretary of Transportation to license, oversee, and coordinate commercial launch activities and to issue and transfer commercial launch licenses. This authority has been delegated to the Federal Aviation Administration's Office of the Associate Administrator for Commercial Space Transportation. The Act charges the Secretary with the responsibility to protect the public health and safety, safety of property, and national security and foreign policy interests of the U.S.

Executive Order 12465, Commercial Expendable Launch Vehicle Activities

Executive Order 12465 establishes the responsibilities of the lead agency and other agencies and states that the Department of Transportation is the lead agency for encouraging and facilitating commercial expendable launch vehicle activities by the private sector. The Order establishes an interagency group composed of the Department of State, Department of Defense, Department of Commerce, Federal Communications Commission, and the National Aeronautics and Space Administration.

Part Three: International Activities, Legal Issues, and Regulations (Interagency Report on Orbital Debris – 1995)

Section II specifies that the Commercial Space Launch Act authorizes DOT to “proscribe such requirements, with respect to launches and operation of launch sites, necessary to protect the public health and safety, safety of property, national security interests and foreign policy interests of the United States.”

Department of Transportation

OCST Guidelines for Compliance with the National Environmental Policy Act and Related Environmental Review Statutes for the Development of Commercial Space Launch Sites

These Guidelines are intended to aid applicants for launch site operator licenses in understanding AST’s policies and procedures for compliance with NEPA requirements.